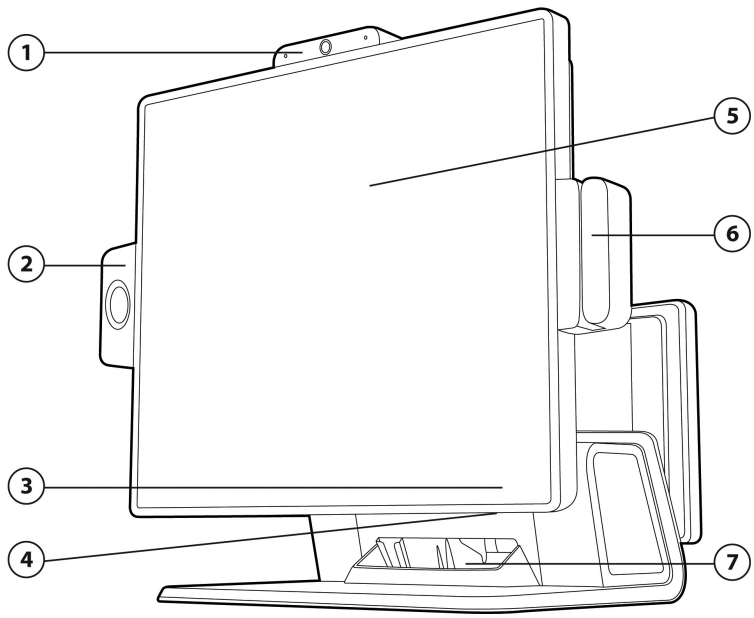
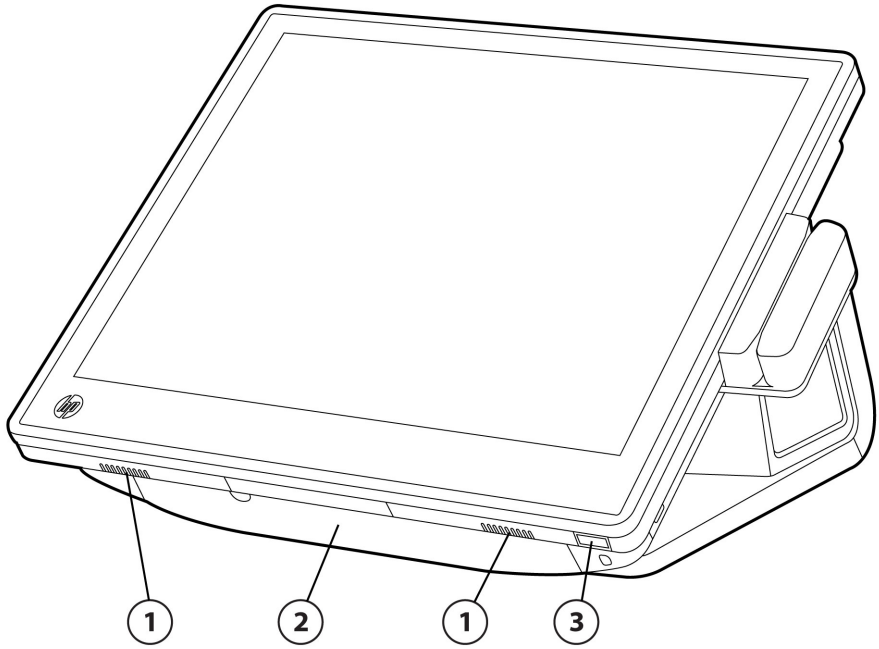
Overview

FRONT VIEW



1. Optional HP Retail Integrated Webcam
2. Optional HP Retail Integrated Fingerprint Reader
3. On-screen display buttons
4. Recessed Power button
5. Touchscreen Assembly
6. Optional HP Retail Integrated Dual-Head MSR
7. Cable pass-through channelCable pass-through channel

Overview

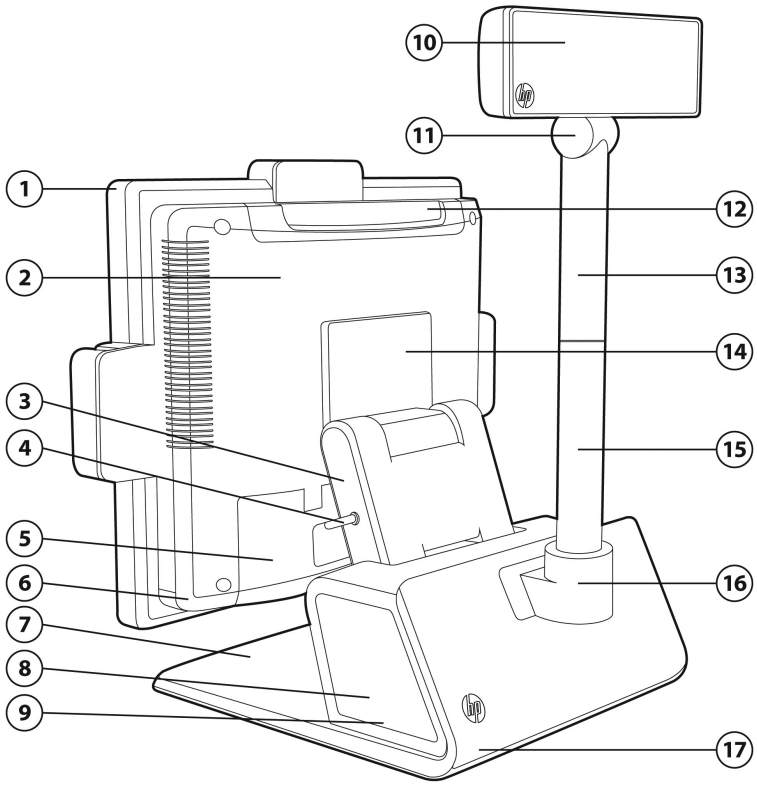


VIEW SHOWING SPEAKERS

1. Speakers
2. I/O Panel Cover
3. Recessed Power Button

HP RP7 Retail System, Model 7800
REAR VIEW WITH 2-LINE DISPLAY - VFD

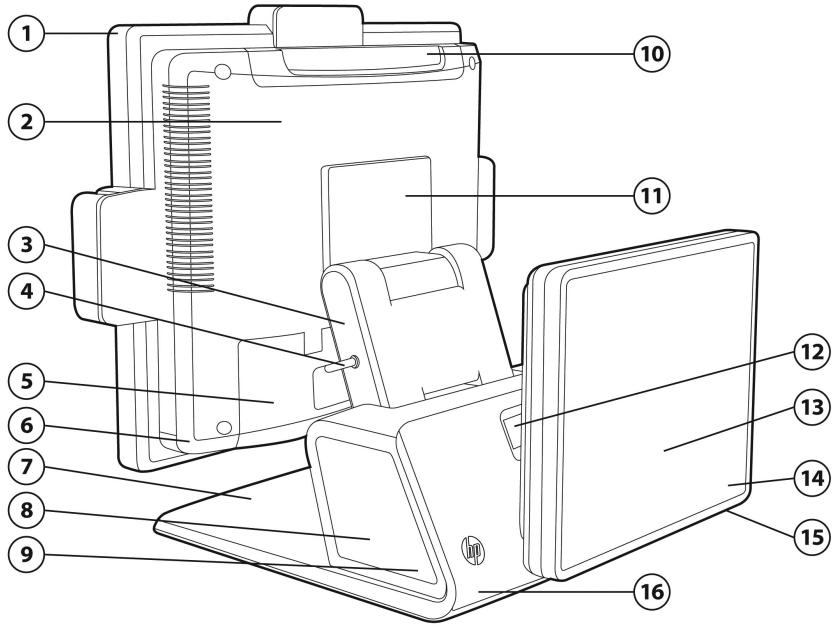
Overview



1. Operator display
2. Rear cover
3. Dual hinge
4. Cable-management retainer
5. I/O Cover
6. Kensington lock & padlock loop
7. Base & keyboard tray
8. Power supply cover (sealed brick inside)
9. "Bolt-to-counter" feature
10. 2-Line VFD
11. VFD Hinge
12. Decorative panel
13. VFD Pole (Section 2)
14. 100mm VESA Mount (Wall Mountable)
15. VFD Pole (Section 1)
16. VFD Mount
17. Decorative panel

HP RP7 Retail System, Model 7800
REAR VIEW WITH CUSTOMER-FACING DISPLAY

Overview



1. Operator display
2. Rear cover
3. Dual hinge
4. Cable retainer
5. I/O cover
6. Kensington lock & padlock loop
7. Base & keyboard tray
8. Power supply cover
9. "Bolt-to-counter" feature
10. Decorative panel
11. 100 mm VESA mount (wall mountable)
12. Customer-facing display hinge
13. Customer-facing display
14. On-screen display LED's
15. Customer-facing display power button
16. Decorative panel

At A Glance

- Designed for long-term deployment within retail and hospitality markets
- Choice of operator display:
  - 15" 5-Wire Resistive Touchscreen
  - 15" Flush-Glass, Projective Capacitive Touchscreen
  - 17" Flush-Glass, Projective Capacitive Touchscreen
- Processor choices:
  - Intel® Core™ i5-2400S (2.50 GHz, 4 cores) featuring Intel® vPro™ Technology and Intel® HD Graphics 2000
  - Intel® Core™ i3-2120 (3.30 GHz, 2 cores) with Intel® HD Graphics 2000
  - Intel® Pentium® G850 (2.90 GHz, 2 cores) with Intel® HD Graphics
  - Intel® Celeron® G540 (2.50 GHz, 2 cores) with Intel® HD Graphics
- Operating System choices:
  - Genuine Windows® 7 Professional (32-bit or 64-bit) (Preinstalled)
  - Genuine Windows® Embedded POSReady 7 (32-bit or 64-bit) (Preinstalled)
  - Genuine Windows® Embedded POSReady 2009 (Preinstalled)
  - FreeDOS 2.0 (Preinstalled)
  - Genuine Windows® XP Professional Edition (32-bit) (Supported)

Overview

- Novell® SUSE Linux Enterprise Desktop† (Certified)
- Integrated peripheral options (can also be purchased and installed separately):
  - HP Retail Integrated Dual-Head MSR
  - HP Retail Integrated Fingerprint Reader
  - HP Retail Integrated Webcam
  - Customer-facing 2 line VFD (Vacuum Fluorescent Display)
  - Customer-facing 10.4" LCD Display
- Industry-standard 100mm VESA mounting pattern allows for flexible use without the optional stand (HP RP7 Adjustable Stand)
- 2 DDR3 Memory Slots (16 GB Maximum)
- Gigabit NIC
- Trusted Platform Module (TPM)
- Hard Drive and Solid-State Drive Options
- RAID level 0,1 capable
- Cable Management Features
- ENERGY STAR® 5 qualified, EU Compliant, RoHS2 Compliant
- 87% energy efficient power supply (enclosed in stand)
- HP Limited Warranty, 3/3/3 standard: 3 years parts, 3 years labor, and 3 years on-site services

OPERATING SYSTEM

Preinstalled	Genuine Windows® 7 Professional (32-bit or 64-bit)
	Genuine Windows® Embedded POSReady 7 (32-bit or 64-bit)
	Genuine Windows® Embedded POSReady 2009
	FreeDOS 2.0
Supported	Genuine Windows XP Professional Edition (32-bit)
Certified	Novell SUSE Linux Enterprise Desktop†

† The following features are not supported by Novell SUSE Linux Enterprise Desktop:

- HP ProtectTools
- Power Management features
- Multi-touch capabilities (Projected Capacitive Touch option)

Systems configured with Linux do not qualify for ENERGY STAR

PROCESSORS

Intel® Core™ i5-2400S (2.50 GHz, 6 MB cache, 4 cores) featuring Intel® vPro Technology and Intel® HD Graphics 2000

Intel® Core™ i3-2120 (3.30 GHz, 3 MB cache, 2 cores) with Intel® HD Graphics 2000

Intel® Pentium® G850 with Intel® HD Graphics (2.90 GHz, 3 MB cache, 2 cores)

Intel® Celeron® G540 with Intel® Graphics (2.50 GHz, 2 MB cache, 2 cores)

INTEL® VPRO™ TECHNOLOGY

HP RP7 Retail Systems featuring this technology include processors that are part of the Intel® Stable Image Platform Program (SIPP) designed to ensure the stability promise inherent in the value proposition of the HP RP7 Retail System.

Intel Advanced Management Technology (AMT) v7.0 - An advanced set of remote management features and functionality which provides network administrators the latest and most effective tools to remotely discover, heal, and protect networked client systems regardless of the system's health or power state. AMT 7.0 includes the following advanced management functions:

- Power Management (on, off, reset)
- Hardware Inventory (includes BIOS and firmware revisions)
- Hardware Alerting
- Agent Presence
- System Defense Filters
- SOL/IDER
- Cisco NAC/SDN Support
- ME Wake-on-LAN
- DASH 1.1 compliance
- IPv6 Support
- Fast Call for Help - a client inside or outside the firewall may initiate a call for help via BIOS screen, periodic connections, or alert triggered connection
- Remote Scheduled Maintenance - pre-schedule when the HP RP7 Retail System connects to the IT or service provider console for maintenance. Remote HP RP7 Retail Systems can get required patches, be inventoried, etc by connecting to their IT console or Service Provider when it's convenient

Standard and Configurable Components

- Remote Alerts - automatically alert IT or service provider if issues arise
- Access Monitor - Provides oversight into Intel® AMT actions to support security requirements
- Alarm Clock
- Microsoft NAP Support
- Host Base set-up and configuration
- Management Engine (ME) firmware roll back
- Wireless AMT functionality on Point of Sale/Desktop (WoDT)
- Enhanced KVM technology

CHIPSET

Intel® Q67 Express

GRAPHICS

Intel HD Graphics Basic and 2000 (integrated)

OPERATOR DISPLAY

15" Resistive Operator Display

Touch Technology	5-wire Resistive
Resolution	1024 x 768
Aspect Ratio	4:3
Max Color	16.7M
Contrast Ratio	700:1
Brightness	350 cd/m^2
Pixel Pitch	0.297mm x 0.297mm
Viewing Angle	160° horizontally and 140° vertically
Response rate	25ms on/off
Default Color Temperature	6500 K
Anti-Glare Hardness	>8H
Color Gamut	52%
Backlight	LED

15" Projective Capacitive Operator Display

Touch Technology	Flush-Glass Projected Capacitive
Resolution	1024 x 768
Aspect Ratio	4:3
Max Color	16.7M
Contrast Ratio	700:1
Brightness	350 cd/m^2
Pixel Pitch	0.297mm x 0.927mm
Viewing Angle	160° horizontally and 140° vertically

Standard and Configurable Components

Response rate	25ms on/off
Default Color Temperature	6500° K
Anti-Glare Hardness	>8H
Color Gamut	52%
Backlight	LED

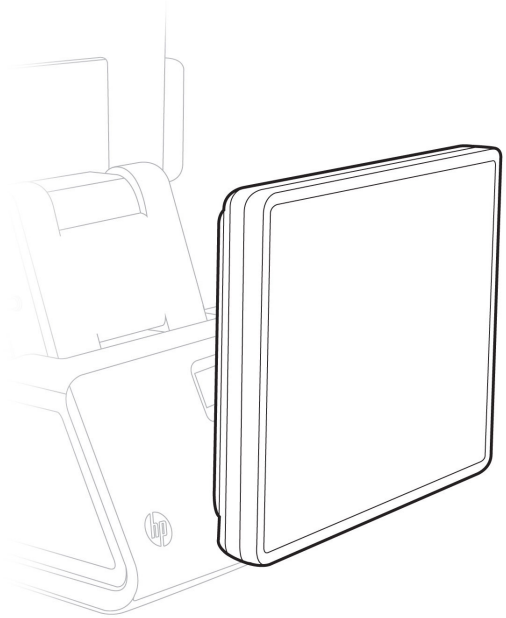
17" Projective Capacitive Operator Display

Touch Technology	Flush-Glass Projected Capacitive
Resolution	1280 x 1024
Aspect Ratio	5:4
Max Color	16.7M
Contrast Ratio	800:1
Brightness	225 cd/m^2
Pixel Pitch	0.264mm x 0.264mm
Viewing Angle	170° horizontally and 160° vertically
Response rate	20m on/off
Default Color Temperature	6500 K
Anti-Glare Hardness	>8H
Color Gamut	68%
Backlight	LED

INTEGRATED PERIPHERAL OPTIONS

HP RP7 10.4-inch Customer Display Option

Standard and Configurable Components



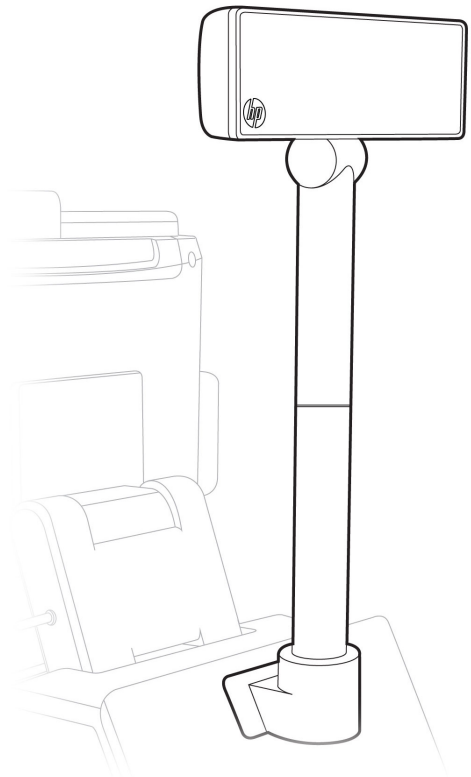
QZ702AA/B0T22AV

Touch Technology	Not supported
Resolution	1024 x 768
Aspect Ratio	4:3
Max Color	16.2M
Contrast Ratio	1000:1
Brightness	300 cd/m2
Pixel Pitch	0.0685(H) x 0.2055(V)
Viewing Angle (of LCD Panel)	176° horizontally and 176° vertically
Tilt Adjustment (of display)	-5deg to + 45deg
Response rate	25ms (rise+fall time)
Default Color Temperature	6500° K
Anti-Glare Hardness	>8H
Color Gamut	57%
Backlight	LED
Video Interface	DVI-I
Dimensions	25.4 x 4.1 x 20.8 (head unit only)
Weight	1.2kg (head unit only)
Power	DC (powered from a DC-Out port on the RP7 terminal)

Standard and Configurable Components

Audio	Integrated speakers (connected through line-out on RP7 terminal)
Optional Stand	A1X79AA

HP RP7 2-Line VFD Customer Display Option



Display Type	Vacuum Fluorescent Display, Blue Green
Brightness	350 - 700 cd/m^2
Character Number	2 x 20
Character Support	Complex Characters and Graphics
Character Font	20 x 2 for 16 x 16 font 10 x 1 for 32 x 32 font 320 x 32 for graphics
Character Size	5.5(W) x 10.5(H) mm
Emulation Modes	ICD-2002, EPSON POS D101, Aedex, UTC/S, UTC/P, ADM788, DSP800, CD5220
Supported Code Pages	Bosnian (852), Croatian (852), Czech (1252), Danish (1252), Dutch (1252), English (US) (437), Estonian (1257), Faroese (1252), Finnish (1252), Flemish (1252), French (1252), German (1252), Greek (1253), Hebrew (1255), Hungarian (852), Icelandic (1252), Indonesian (1252), International English (1252), Italian (1252), Japanese (Shift-JIS), Latvian (1257), Lithuanian (1257), Norwegian (865), Polish (852), Slavonic/Russian (866), Slovak (852), Slovene (852), Spanish (1252), Swedish (1252), Thai (874)

Standard and Configurable Components

Horizontal Rotation	180°
Height Adjustment	(through two included pole extension options)
Tilt Adjustment	-5° to 60°
Interface/Connection	USB+PWR 12V (connects to the RP7 I/O panel)
Mechanical Dimensions (LxWxH)	226 x 40.05 x 72 mm
Power Voltage (typical)	12V nominal
Drivers	OPOS, JPOS

HP RP7 Adjustable Stand

B0T02AV/ QZ703AA	Stand can be pre-configured with the HP RP7 Retail System or purchased and installed separately. The stand connects to the terminal through an industry-standard 100mm VESA pattern and conceals the sealed power supply for the RP7. The dual-hinge mechanism allows for a broad range of user adjustability and allows the terminal to be used in an upright or a low-profile, reclining position. The built-in cable-management features provide for a clean terminal installation and bolt-down capabilities allow the terminal to be secured to the counter.

HP Retail Integrated Dual-Head MSR

QZ673AA/B0T12AV

General	**Magnetic stripe formats**	ISO 7811(JIS I), AAMVA
	Card thickness	0.015 to 0.045 in (0.38 to 1.14 mm)
	Indicators	Audio
Mechanical	**Dimensions (LxWxH)**	3.94in x 3.06in x 1.34in (99.98mm x 77.8mm x 34mm)
	Weight	4.06 oz (115g)
	Slot width	0.45 in (0.114 cm)
	Color	HP Jack Black
Interface/ Connection	**Interface**	USB 2.0
	Connection	Type A
Power	**Voltage (typical)**	5.0V +/- 5% supplied by USB, 50mV ripple max
	Current consumption (typical)	40mA max
Drivers		Windows Native, OPOS, JPOS
Operating Systems	**Compatibility**	Microsoft Windows 7 Professional 32-bit Microsoft Windows 7 Professional 64-bit Microsoft Windows Embedded POSReady 2009 Microsoft Windows Embedded POSReady 7 32-bit Microsoft Windows Embedded POSReady 7 64-bit Microsoft Windows XP Professional

Standard and Configurable Components

Option Kit Contents	HP Retail Integrated Dual-Head MSR, HP Point of Sale System Software and Documentation CD.	

HP Retail Integrated Fingerprint Reader

QZ672AA/B0T13AV

General	**Scan Data**	8-bit grayscale (256 levels of gray)
	Pixel resolution	512 dpi (average x,y over the scan area)
	Scan capture area	14.6 mm (nom. width at center) 18.1 mm (nom. length)
Mechanical	**Dimensions (L x W x H)**	3.94in x 3.06in x 1.34in (99.98mm x 77.8mm x 34mm)
	Weight	3.39 oz (96 g)
	Color	HP Jack Black
Interface/ Connection	**Interface**	USB 2.0
Power	**Supply Voltage**	5.0V ±5% supplied by USB
	Supply Current scanning	< 100 mA (Typical)
	Supply Current idle mode 1	20 mA (Typical)
	Supply Current-suspend mode	< 0.5 mA (Maximum)
Environmental	**Temperature**	Operating 0 - 40 C
	Humidity	Operating 20% - 80% non-condensing
Drivers		Windows Native
Operating Systems	**Compatibility**	Microsoft Windows 7 Professional 32-bit Microsoft Windows 7 Professional 64-bit Microsoft Windows Embedded POSReady 2009 Microsoft Windows Embedded POSReady 7 32-bit Microsoft Windows Embedded POSReady 7 64-bit Microsoft Windows XP Professional
Option Kit Contents	HP Retail Integrated Fingerprint Reader, HP Point of Sale System Software and Documentation CD.	

HP Retail Integrated Webcam

QZ700AA/B0T03AV

General	**CMOS Sensor**	OV9726
	Resolution	HD: 1280x720
	Image Control	Automatic Exposure, Automatic White Balance, Automatic Gain
	Field of View	74.9°
	Focus Distance	19.69 in (500 mm)
	Focus Range	20.5cm ~ infinity
	Microphone	Yes (2, Stereo)

Standard and Configurable Components

Mechanical	**Dimensions (LxWxH)**	3.94in x 1.77in x 1.34in (100mm x 44.9mm x 34mm)
	Weight	2.05 oz (58g)
	Color	HP Jack Black
Interface/ Connection	**Interface**	USB 2.0
Power	**Voltage (typical)**	3.3V (5V to 3.3V conversion board inside Webcam module to make it USB compatible)
	Current consumption (typical)	150mA
Drivers		Windows Native
Operating Systems	**Compatibility**	Microsoft Windows 7 Professional 32-bit
		Microsoft Windows 7 Professional 64-bit
		Microsoft Windows Embedded POSReady 2009
		Microsoft Windows Embedded POSReady 7 32-bit
		Microsoft Windows Embedded POSReady 7 64-bit
		Microsoft Windows XP Professional
Option Kit Contents	HP Retail Integrated Webcam, HP Installation Guide.	

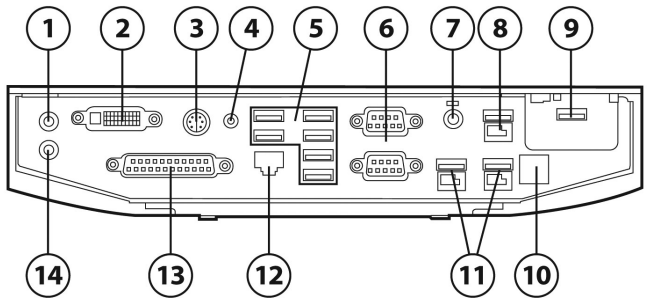
I/O PORTS - CONNECTIVITY

6 USB 2.0
2 USB+PWR 12V (1 available if HP RP7 VFD Customer Display is installed)
1 USB+PWR 24V (Printer)
1 USB in lockable compartment (Security screw provided and housed in I/O cover. Requires the HP security screwdriver)
1 RJ-12 Cash Drawer (dual drawers via optional Y cable)
2 RS-232 Powered (+5V/+12V, F-10 Setup Configurable)
1 Parallel
1 PS/2 (supports keyboard or mouse, both through a splitter)
1 DVI-I for Secondary Display (not available if HP RP7 10.4-inch CFD is installed)
1 RJ-45 10/100/1000 LAN
1 Audio line-in
1 Audio line-out (not available if HP RP7 10.4-inch CFD (Customer Facing Display)is installed and audio is connected)
1 DC-in (for power supply)
1 DC-out (for HP RP7 10.4-inch CFD only)
4 connectors for select HP integrated peripherals

Standard and Configurable Components

HP RP7 Retail System, Model 7800

I/O PANEL



1. 1 Audio line-in
2. 1 DVI-I for Secondary Display (not available if HP RP7 10.4-inch CFD is installed)
3. 1 PS/2 (supports keyboard or mouse, both through a splitter)
4. 1 DC-out (for HP RP7 10.4-inch CFD only)
5. 6 USB 2.0
6. 2 RS-232 Powered (+5V/+12V, F-10 Setup Configurable)
7. 1 DC-in (for power supply)
8. 1 USB+PWR 24V (Printer)
9. 1 USB in lockable compartment (Security screw provided and housed in I/O cover. Requires the HP security screwdriver)
10. 1 RJ-12 Cash Drawer (dual drawers via optional Y cable)
11. 2 USB+PWR 12V (1 available if HP RP7 VFD Customer Display is installed)
12. 1 RJ-45 10/100/1000 LAN
13. 1 Parallel
14. 1 Audio line-out (not available if HP RP7 10.4-inch CFD is installed and audio is connected)

STORAGE

Size

2.5"

Drive Bays

2 (See below for RAID capabilities)

OPTIONS:

SATA Hard Drives

320 GB, 7200 rpm, SATA 6.0 Gb/s, SMART IV, 2.5"

Solid State Drives

32 GB SSD, 2.5" (RAID not supported)

128 GB SSD, 2.5"

256 GB SSD, 2.5"

REDUNDANT ARRAY OF INDEPENDENT DRIVES (RAID)

Flexible implementation:

- DriveLock is supported while in RAID mode. Users can manage the DriveLock password from within F10 Setup. Locked drives will be displayed as such in the RAID option ROM interface.
- Hard drive information can be viewed within F10 Setup while in RAID mode. Previously, the hard drives will not appear in Drive Configuration when switching to RAID mode.
- DPS Self Test can be executed on physical hard drives while in RAID mode.
- The RAID Setup Utility (accessed through CTRL-I) can be protected by the F10 Setup password.

NOTE: RAID 1 is the only RAID configuration offered via factory configurations. RAID is not supported on the 32GB SSD. The pre-configured systems:

- Are complete RAID systems and have both drives installed.
- Have the necessary Option ROM configuration.
- Are pre-loaded and pre-installed with all required Intel software.
- Include a preinstalled operating system that is mirrored mode out of the box.

Please refer to the HP White Paper titled "Advanced Host Controller Interface (AHCI) and Redundant Array of Independent Disks (RAID) on HP Compaq PCs" at: http://www.hp.com for more information and instructions.

MEMORY

Type

Non-ECC, DDR3 SDRAM, 1333 MHz, SODIMM
(**NOTE:** 1600 MHz memory may ship on rp7 but the memory will not run at 1600MHz. It will clock down to 1333MHz)

Maximum

16 GB

# of Slots

2

NOTE: Full availability of 4 GB or more of memory requires a 64-bit operating system. With Windows 32-bit operating systems, the amount of usable memory is dependent upon your configuration, so that above 3 GB all memory may not be available due to system resource requirements.

MEMORY UPGRADES

Memory upgrades are accomplished by adding single or multiple DIMMs of the same or varied sizes. This chart does not represent all possible memory configurations. The HP RP7 Retail System supports non-ECC DDR3 PC3-10600 (1333 MHz) and PC3-8500 (1066 MHz) memory.

CAUTION: You must shut down the Retail System and disconnect the power cord before adding or removing memory modules. Regardless of the power-on state, voltage is always supplied to the memory modules as long as the Retail System is plugged in to an active AC outlet. Adding or removing memory modules while voltage is present may cause irreparable damage to the memory modules or system board.

Standard and Configurable Components

MEMORY CONFIGURATIONS

Slot	1	2
1 GB	1 GB	
2 GB	1 GB	1 GB
4 GB	2 GB	2 GB
8 GB	4 GB	4 GB
16 GB	8 GB	8 GB

SOFTWARE

HP Client Management Solutions (available for free download from hp.com/go/easydeploy)

HP SoftPaq Download Manager

HP Client Catalog for Microsoft SMS

HP Systems Software Manager

HP Client Automation Starter

NETWORK CONNECTIVITY

Integrated Intel® 82579LM Gigabit Ethernet Network Connection

Optional Wireless LAN: Intel 6205 802.11 a/b/g/n 6205 Mini PCIe NIC

Intel® 82579LM GbE Network Connection (integrated)

Connector	RJ-45
Controller	Intel 82579LM gigabit platform LAN connect networking controller
Memory	24 KB FIFO packet buffer memory
Data rates supported	10/100/1000 Mbps
Compliance	IEEE 802.1P, 802.1Q, 802.2, 802.3, 802.3 ab and 802.3u compliant, 802.3az
Bus architecture	PCIe and SMBus
Data transfer mode	PCIe-based interface for active state operation (S0 state) and SMBus for host and management traffic (Sx low power state)
Data rates supported	10/100/1000 Mbps
ACBS	Intel Auto Connect Battery Saving feature
Power Saving Features	Auto Connect Battery Saver (ACBS) Automatic Link Downshift Low Power Link Up (LPLU)
Boot ROM support	Yes
Network transfer mode	Full-duplex Half-duplex (not supported for the 1000BASE-T transceiver)

Standard and Configurable Components

Network transfer rate	10BASE-T (half-duplex) 10 Mbps 10BASE-T (full-duplex) 20 Mbps 100BASE-TX (half-duplex) 100 Mbps 100BASE-TX (full-duplex) 200 Mbps 1000BASE-T (full-duplex) 2000 Mbps
Management	WOL, auto MDI crossover, PXE, Muti-port teaming, RSS, Advanced cable diagnostic.
Alerting	ASF 2.0 support, AMT 6.0 support

AUDIO/MULTIMEDIA

Rear-line input (supports microphone or line input), lineout
All ports are 3.5mm in diameter

High Definition Audio with Realtek ALC221 codec (all ports are stereo)

SRS Premium Sound audio management technology

Multi-streaming capable*

Dual Internal Speakers (standard)

* Audio input ports are re-taskable as a Line-in or Microphone-in port. External speakers must be powered externally. Multi-streaming can be enabled in the Realtek control panel to allow independent audio streams to be sent to/from the front and rear jacks. This allows for different audio applications to use separate audio ports on the system. For example, the front jacks could be used with a headset for a communications application while the rear jacks are being used with external speakers and a multimedia application.

POWER

Power Supply	180W External power supply, 87% Efficiency, Active PFC *This power supply meets ENERGY STAR compliance in conjunction with a select range of processors and modules.
Operating Voltage Range	90 to 264 VAC
Rated Voltage Range	100 to 240VAC
Rated Line Frequency	50/60 Hz
Operating Line Frequency Range	47 - 63 Hz
Rated Input Current	<2.9A AVG Efficiency 87% (calculated by testing at 20/50/75/100% load)
Power Supply Fan	None
ENERGY STAR® Compliant	ENERGY STAR® 5.0 compliant
Power Cord Length	6.0ft (1.83m)
Current Leakage (NFPA99)	< 275 µA

WEIGHTS & DIMENSIONS

NOTE: Weight and dimensions below do not include MSR, Biometric Reader, Webcam, VFD, or CFD.

Weight	**With stand - 15" Display Option**

	12.31 kg/27.37 lbs
	With stand - 17" Display Option 13.03 kg/28.96 lbs
	Without stand - 15" Display Option 6.25 kg/13.78 lbs
	Without stand - 17" Display Option 7 kg/15.43 lbs
Dimensions (W x D x H)	**With stand - 15" Display Option** 36.6 x 42.4 x 33.58 cm 14.41 x 16.7 x 13.22 in
	With stand - 17" Display Option 38.6 x 43.07 x 34.72 cm 15.19 x 16.95 x 13.67 in
	Without stand - 15" Display Option 36.6 x 8.94 x 31.3 cm 14.41 x 3.52 x 14.41in
	Without stand - 17" Display Option 38.56 x 9.1 x 33.89 cm 15.18 x 3.58 x 13.34 in
Box Dimension	**With Stand** 54.7 x 49.2 x 68.8 cm 21.54 x 19.37 x 27.09 in
	Without Stand 54.2 x 48.5 x 16.9 cm 21.34 x 19.09 x 6.65 in
Shipping Weight	**With Stand - 15"** Min weight 16.71kg Max weight 19.17kg
	With Stand - 17" Min weight 17.25kg Max weight 19.72kg
	Without Stand - 15" Min weight 8.32kg Max weight 8.59kg
	Without Stand - 17" Min weight 9.15kg Max weight 9.15kg
	(For shipping weigh the minimum weight with no peripherals and 1 HDD, Maximum weight with CFD, webcam, Biometric reader, MSR reader, and 2 HDD's)

TEMPERATURE, HUMIDITY, ALTITUDE

Temperature	Operating	50° to 104° F (10 to 40° C)
	Non-operating	-22° to 149° F (-30°to 65° C)
Relative humidity	Operating	20 to 85%
Altitude (unpressurized)	Operating	0 to 10,000 ft (3,048 m)
	Non-operating	0 to 30,000 ft (9,144 m)

ENVIRONMENTAL & INDUSTRY

Eco-Label Certifications & Declarations

This product has received or is in the process of being certified to the following approvals and may be labeled with one or more of these marks:

- US ENERGY STAR®
- IT ECO declaration
- EPEAT® Gold where HP registers commercial desktop products. See http://www.epeat.net for registration status in your country

Energy Consumption	**115 VAC**	**230 VAC**	**100 VAC**
Normal Operation	28.95W	28.03W	29.01W
Sleep (Energy Star low power mode)	3.24W	3.16W	3.25W
Off	1.29W	1.36W	1.30W

NOTE: Energy efficiency data listed is for an ENERGY STAR® compliant product if offered within the model family . HP computers marked with the ENERGY STAR® Logo are compliant with the applicable U.S. Environmental Protection Agency (EPA) ENERGY STAR® specifications for computers. If a model family does not offer ENERGY STAR® compliant configurations, then energy efficiency data listed is for a typically configured model.

Heat Dissipation	**115 VAC**	**230 VAC**	**100 VAC**
Normal Operation	99 BTU/hr	96 BTU/hr	99 BTU/hr
Sleep (Energy Star low power mode)	11 BTU/hr	11 BTU/hr	11 BTU/hr
Off	4 BTU/hr	4 BTU/hr	4 BTU/hr

*__NOTE:__ Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.

Declared Noise Emissions (in accordance with ISO 7779 and ISO 9296)	**Sound Power (LWAd, bels)**	**Sound Pressure (LpAm, decibels)**
(Typically configured)		
Idle	3.3	22
Fixed Disk (random writes)	3.3	22

Batteries This battery(s) in this product comply with EU Directive 2006/66/EC

Batteries used in the product do not contain:

- Mercury greater the 5ppm by weight
- Cadmium greater than 10ppm by weight

Battery size: CR2032 (coin cell)
Battery type: Lithium

Additional formation

This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2002/95/EC.
This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive - 2002/96/EC.
This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986).
This product is in compliance with the IEEE 1680 (EPEAT) standard at the Gold level where HP registers commercial desktop products. See http://www.epeat.net for registration status in your country.
Plastics parts weighing over 25 grams used in the product are marked per ISO 11469 and ISO1043.
This product contains 26% post consumer recycled plastic (by wt.)
This product is 96.2% recyclable when properly disposed of at end of life.

Packaging Materials
External:
PAPER/Corrugated - 2 g

Internal:
PLASTIC/Polyethylene high density - 42.2 g
PLASTIC/EPE-Expanded Polyethylene - 1745 g

The PAPER/corrugated packaging material is made from 24% recycled content.
The PLASTIC/Polyethylene high density packaging material is made from 1.8% recycled content.
The PLASTIC/EPE-Expanded Polyethylene packaging material is made from 1.8% recycled content.

RoHS Compliance

Hewlett-Packard is committed to compliance with all applicable environmental laws and regulations, including the European Union Restriction of Hazardous Substances (RoHS) Directive. HP's goal is to exceed compliance obligations by meeting the requirements of the RoHS Directive on a worldwide basis. By July 1, 2006, RoHS substances will be virtually eliminated (virtually = to levels below legal limits) for all HP electronic products subject to the RoHS Directive, except where it is widely recognized that there is no technically feasible alternative (as indicated by an exemption under the EU RoHS Directive).

Material Usage

This product does not contain any of the following substances in excess of regulatory limits (refer to the HP General Specification for the Environment at: http://www.hp.com/hpinfo/globalcitizenship/environment/supplychain/gen_specifications.html):
Asbestos
Certain Azo Colorants
Certain Brominated Flame Retardants - may not be used as flame retardants in plastics
Cadmium
Chlorinated Hydrocarbons
Chlorinated Paraffins
Formaldehyde

Standard and Configurable Components

	Halogenated Diphenyl Methanes Lead carbonates and sulfates Lead and Lead compounds Mercuric Oxide Batteries Ozone Depleting Substances Polybrominated Biphenyls (PBBs) Polybrominated Biphenyl Ethers (PBBEs) Polybrominated Biphenyl Oxides (PBBOs) Polychlorinated Biphenyl (PCB) Polychlorinated Terphenyls (PCT) Polyvinyl Chloride (PVC) - except for wires and cables, and certain retail packaging has been voluntarily removed from most applications. Radioactive Substances Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)
Packaging	HP follows these guidelines to decrease the environmental impact of product packaging: Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials. Eliminate the use of ozone-depleting substances (ODS) in packaging materials. Design packaging materials for ease of disassembly. Maximize the use of post-consumer recycled content materials in packaging materials. Use readily recyclable packaging materials such as paper and corrugated materials. Reduce size and weight of packages to improve transportation fuel efficiency. Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.
End-of-life Management and Recycling	Hewlett-Packard offers end-of-life HP product return and recycling programs in many geographic areas. To recycle your product, please go to: http://www.hp.com/go/reuse-recycle or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner. The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/recyclers. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.
Hewlett-Packard Corporate Environmental Information	For more information about HP's commitment to the environment: Global Citizenship Report http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html Eco-label certifications http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html ISO 14001 certificates: http://www.hp.com/hpinfo/globalcitizenship/environment/operations/envmanagement.html

SERVICE AND SUPPORT

On-site Warranty[Note 1]: Limited warranty delivers on-site, next business-day[Note 2] service for parts and labor and includes free telephone support[Note 3] 24 x 7. The warranty terms vary by region and onsite and labor are not available in all countries. Depending on region and warranty terms, extended service offers terms up to 3 years by choosing a Carepack. To choose the right level of extended service for your HP product, visit HP Care Pack Central: www.hp.com/go/cpc

NOTE 1: Terms and conditions may vary by country. Certain restrictions and exclusions apply. Other warranty variations may be offered in your region.

NOTE 2: On-site service may be provided pursuant to a service contract between HP and an authorized HP third-party provider, and is not available in certain countries. Global service response times are based on commercially reasonable best effort and may vary by country.

NOTE 3: Technical telephone support applies only to HP-configured Compaq and third-party HP-qualified hardware and software. Toll-free calling and 24 x 7 support may not be available in some countries.

Options and Accessories (sold separately)

OPTIONS AND ACCESSORIES (sold separately)

Input Devices	Part Number
HP RP7 VFD Customer Display	QZ701AA
HP RP7 10.4 inch CFD Display	QZ702AA
HP Retail Integrated Dual-Head MSR	QZ673AA
HP Retail Integrated Fingerprint Reader	QZ672AA
HP Retail Integrated Webcam	QZ700AA
HP POS Keyboard without MSR (AMS Region Only)	FK221AA
HP POS Keyboard with MSR	FK218AA
HP PS/2 Standard Keyboard	DT527A
HP USB Standard Keyboard	DT528A
HP USB Mini Keyboard	AS601AA
HP USB Washable Keyboard	BM866AA
HP USB and PS/2 Washable Keyboard and Mouse Kit	BU207AA
HP PS/2 Optical Mouse	EY703AA
HP USB Optical Mouse	DC172B
HP USB Laser Mouse	GW405AA
Security	
HP/Kensington MicroSaver Cable Lock	PC766A
HP Business PC Security Lock	PV606AA
HP Keyed Lock Cable	BV411AA
Barcode Scanners	
HP Imaging Barcode Scanner	BW868AA
HP Linear Barcode Scanner	QY405AA
HP Presentation Barcode Scanner	QY439AA
Cash drawers	
HP Heavy Duty Cash Drawer	FK182AA
HP Standard Duty Cash Drawer	QT457AA
HP Standard Duty Till with Locking Cover	QT458AA
HP Flip-Top Cash Drawer (EMEA Region Only)	BW867AA
HP Flip-Top Till with Locking Cover (EMEA Region Only)	BZ335AA
HP Cable Pack for Dual Cash Drawers	QT538AA
Printers	
HP Powered USB Thermal Receipt Printer	FK224AA
HP Serial/USB Thermal Receipt Printer	BM476AA
HP Hybrid Printer with MICR	FK184AA

Options and Accessories (sold separately)

HP USB Y Cable (for Serial USB/Receipt Printer)	BM477AA

System Memory

2GB DDR3-1600 SODIMM	B4U38AA
4GB DDR3-1600 SODIMM	B4U39AA
8GB DDR3-1600 SODIMM	B4U40AA

Storage

128GB SATA 2.5 SSD	QV063AA
320 GB 7200 SATA 2.5 HDD	D1S10AA

MSR

HP Mini-MSR	FK186AA

Displays

HP POS Pole Display	FK225AA
HP Graphical POS Pole Display	QZ704AA

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